



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/767,577

01/29/2004

Uwe-Jens Krabbenhoft

HK-794

6185

24131 7590 01/23/2008  
LERNER GREENBERG STEMER LLP  
P O BOX 2480  
HOLLYWOOD, FL 33022-2480

EXAMINER

WASHINGTON, JAMARES

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

01/23/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/767,577

Applicant(s)

KRABBENHOFT, UWE-JENS

Examiner

Jamares Washington

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Reopening of Prosecution After Appeal Brief or Reply Brief**

In view of the appeal brief filed on November 6, 2007, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

*Response to Amendment*

2. Applicant's response received on August 21, 2007 has been entered. Claims 1-5 are currently pending. Applicant's amendments and arguments are addressed hereinbelow.

*Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Stuart Frederick Ring et al (US 5754184).

Regarding claim 1, Ring discloses a method of transforming color values of a first device-dependent color space into color values of a second device-dependent color space, to effect a substantially identical visual impression of colors reproduced in the first and second color spaces (Col. 2 lines 1-6), the method which comprises:

providing a first color profile characterizing the first color space (Fig. 1 numeral 10; scanner RGB signal) and providing a second color profile characterizing the second color space (Fig. 1 numeral 24; Monitor RGB);

wherein the first and second color profiles specify an association between the color values of the first and second device-dependent color spaces and the color values of a device-independent color space (Col. 2 lines 33-36 and Col. 2 lines 49-58);

wherein a white point of the first device-dependent color space, a white point of the second device-dependent color space, and a white point of the device-independent color space are described by device-independent white point values ("scaling: destination/source" at Col. 7 lines 25-34; Col. 6 line 36 Input Adaptation white point, Col. 6 line 28 D5000 adaptation white point, Col. 7 line 56 9300K adaptation white point for monitor);

determining relative color values of the device-independent color space from the color values of the first device-dependent color space by way of the association specified in the first color profile (Col. 7 lines 15-19);

converting the relative color values into absolute color values in a ratio corresponding to a ratio of the values of the white point of the first device-dependent color space and the white point of the device-independent color space (Col. 7 lines 20-23);

determining chromatically adapted color values from the absolute color values by way of a chromatic adaptation transformation, the chromatic adaptation transformation includes converting the absolute color values into receptor signals L, M, S of color receptors by use of matrix multiplication (Col. 7 lines 25-50 wherein the receptor signals (L, M, and S) are represented by  $\rho$ ,  $\beta$ , and  $\gamma$ );

converting the chromatically adapted color values into relative chromatically adapted color values in a ratio corresponding to a ratio of the values of the white point of the device-independent color space and the white point of the second device-dependent colorspace (Col. 7 lines 53-65); and

determining color values of the second device-dependent color space from the relative chromatically adapted color values by way of the association specified in the second color profile (Col. 8 lines 10-27).

Regarding claim 3, Ring discloses the method according to claim 1, which comprises carrying out the chromatic adaptation transformation in accordance with a von Kries matrix (Col. 7 lines 23-24).

### *Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ring in combination with Graham D. Finlayson et al (IS&T/SPIE Electronic Imaging, SPIE Vol. 4300, January 2001).

Regarding claim 2, Ring discloses the method according to claim 1, which comprises carrying out the chromatic adaptation transformation by way of a matrix.

Ring fails to disclose or suggest carrying out the chromatic adaptation transformation by way of a Bradford matrix.

Finlayson et al teaches, in the same field of endeavor of accurate color duplication ("reproducing the appearance of image colors" at page 1 paragraph 3), a chromatic adaptation transformation by way of a Bradford matrix ("Bradford Chromatic Adaptation Transform (BFD CAT)" page 2, numeral 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the Bradford matrix in place of the Von Kries matrix described in the chromatic adaptation transformation of Edge's color correction techniques because, at the time, the Bradford matrix was the most widely used and newest transform giving the most accurate results in color reproduction.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ring in view of Geoffrey J. Woolfe et al (US 6850342 B2).

Regarding claim 4, Ring discloses the method according to claim 1.

Ring fails to explicitly disclose or suggest comprising using color profiles formatted in accordance with the ICC specification (International Color Consortium).

Woolfe, in the same field of endeavor, teaches using color profiles formatted in accordance with the ICC specification (Col. 15 lines 28-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the method of transforming color values of a first device-dependent color space into color values of a second device-dependent color space, to effect a substantially identical visual impression of colors reproduced in the first and second color spaces as disclosed by Ring to implement the method utilizing color profiles formatted in accordance with the ICC specification as taught by Woolfe because the ICC profiles provide for standardized formats of needed color information, including device transform color information, gamut mapping information, coordinate transform information (such as transforms to perceptual color space) and the like.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ring in view of Kim Jin-Seo et al ("Development of Color Management System Prototype" IEEE, 1998).

Regarding claim 5, Ring discloses the method according to claim 1.

Ring fails to disclose or suggest leaving unchanged the associations contained in the color profiles between the color values of the device-dependent color space and the color values of the device-independent color space.

However, Jin-Seo et al further teaches the above limitation ("Furthermore, we develop new tags for scanner and monitor which are not in the current ICC profiles. When users select



one of the profiles, a dialog box shows the information of the profile..." at page 3 column 1 under "Profile Editor" line 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the profile editing feature of saving relative profile matches as taught by Jin-Seo in the method of using ICC color profiles as disclosed by Ring to enable users to "change the parameters so that the output image matches the original one" (at page 3 column 2 line 3, Jin-Seo).

### *Response to Arguments*

9. Applicant's arguments, see Appeal Brief, filed November 06, 2007, with respect to the rejection(s) of claim(s) 1 under 35 U.S.C. 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Stuart Frederick Ring et al (US 5754184).

### *Conclusion*

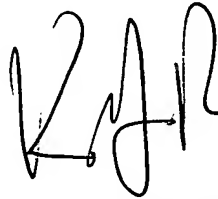
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jmares Washington whose telephone number is (571) 270-1585. The examiner can normally be reached on Monday thru Friday: 7:30am-5:00pm.

Application/Control Number:  
10/767,577  
Art Unit: 2625

Page 9

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jamares Washington  
Junior Examiner  
Art Unit 2625

KING Y. POON  
SUPERVISORY PATENT EXAMINER

  
JW

January 15, 2008